

REMARKS**Request for Continued Examination**

Applicant respectfully requests continued examination of the above-indicated
5 application as per 37 CFR 1.114.

Claims 1, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Patel et al (US 6,480,528) in view of Owen et al (US 20040204098) further in
10 view of Lemson (US5,457,811).

Please see the following section regarding allowable subject matter.

15 Allowable Subject Matter – Claims 2-17 are objected to but would be allowable if
rewritten in independent form including all of the limitations of the base claim
and any intervening claims.

Independent claim 1 is amended to include limitations equivalent to those
20 originally found in claim 2, which as stated by the Examiner in the Office action of
02/08/2007 was found allowable for at least the reason that the prior art fails to teach
wherein the received RMS power for one antenna is determined as the square root of
the averaged product of each received symbol and its complex conjugate for all
symbols of the first group. Claim 2 is correspondingly cancelled and claims 3, 8, and
25 13, previously dependent upon claim 2, are amended to be dependent upon currently
amended claim 1. Additionally, claim 1 (including the limitations originally present in
claim 2) is further amended to delete the word “first” from the phrase “first group”
because there is only one group mentioned in claim 1 so there is no need to include
the word “first”. Dependent claims 3, 4, 5, 6, and 7 are correspondingly amended to
30 change the phrase “second group” to “first group”, and dependent claims 13, 14, 15,
16, and 17 are amended to change the phrase “second group” to “third group”. No

new matter is entered.

In this way, applicant asserts that claims 1, 3-19 should be found allowable for at least the reason that the prior art fails to teach wherein the received RMS power for one antenna is determined as the square root of the averaged product of each received
5 symbol and its complex conjugate for all symbols of the group.

Claim 21 is cancelled. Please see the below comments responding to the rejection of claim 20 for further information regarding the reasoning for canceling claim 21.

10 **Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al (US 6,480,528) in view of Owen et al (US 20040204098) Lemson (US5,457,811) further in view of Chang (US20040146091).**

As previously mentioned, claim 19 is dependent upon claim 1, and therefore
15 claim 19 is believed allowable by the applicant for at least the same reasons provided above for claim 1. Withdrawal of the 35 USC 103a rejection of claim 19 is respectfully requested.

20 **Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Patel et al (US 6,480,528) in view of Owen et al (US 20040204098).**

Independent claim 20 is amended to include the limitations of claim 21 and limitations equivalent to those originally present in claim 2. Specifically, claim 20 is
25 amended to include the clause, "wherein the first and second candidate powers are determined according to root-mean-square (RMS) powers of the first and second group of symbols respectively, and each RMS power is determined as the square root of the averaged product of each received symbol and its complex conjugate for all symbols of each group". Claim 21 is correspondingly cancelled, and claim 20 is
30 further amended to correct an antecedent basis problem discovered during the drafting of this RCE (*the* selected candidate power); and to indicate that "a first group of symbols received at the first antenna", and "a second group of symbols received at the

second antenna." (newly inserted text in underline) No new matter is entered.

In this way, applicant asserts that claim 20 should also be found allowable with respect to the prior art because the prior art at least does not teach or suggest "the first and second candidate powers are determined according to root-mean-square (RMS) powers of the first and second group of symbols respectively, and the each RMS power is determined as the square root of the averaged product of each received symbol and its complex conjugate for all symbols of the each group", as is claimed in claim 20. Consideration of currently amended claim 20 is respectfully requested.

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New claims

New claims 22-28 are added being dependent upon claim 20. No new matter is entered. In particular:

15 Claims 22-24 are supported in paragraph [0013] of the specification as originally filed stating, "According to the claimed invention, candidate powers for a second group of antennas can be: an RMS value of the RMS powers for each antenna, an average of the RMS powers for each antenna, or a geometric mean of the RMS powers for each antenna."

20 Claim 25 contains limitations equivalent to those originally claimed in claim 18.

Claim 26 contains limitations equivalent to those originally claimed in claim 19.

Claim 27 is supported by Fig.7 showing a third antenna and by Fig.9 indicating that up to M (where M can be greater than 2 as shown in Fig.9) amplifiers, ADCs, and OFDMs can be utilized.

25 Finally, claim 28 is supported in supported in paragraph [0013] and claim 2 of the specification as originally filed.

New claims 22-28 are dependent upon claim 20, which as previously stated is believed allowable by the applicant for the above stated reasons. Therefore, applicant asserts that claims 22-28 should be found allowable for at least the same reasons. Consideration of new claims 22-28 is respectfully requested.

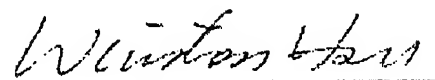
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Conclusion

Thus, all pending claims are submitted to be in condition for allowance with
5 respect to the cited art for at least the reasons presented above. The Examiner is
encouraged to telephone the undersigned if there are informalities that can be resolved
in a phone conversation, or if the Examiner has any ideas or suggestions for further
advancing the prosecution of this case.

Applicant respectfully requests that a timely Notice of Allowance be issued in
10 this case.

Sincerely yours,



Date: 05.07.2007

15 Winston Hsu, Patent Agent No. 41,526
P.O. BOX 506, Merrifield, VA 22116, U.S.A.
Voice Mail: 302-729-1562
Facsimile: 806-498-6673
e-mail : winstonhsu@naipo.com

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in
D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)